

**ABSTRACT**

A liquid crystal display device and a method for improving a color reproducibility thereof, detects a gray scale value in applied image information that reduces a color reproducibility of a liquid crystal display device by measuring a gray scale level of a color displayed on a liquid crystal display panel while increasing the gray scale value of the color, and storing a maximum value of the gray scale level is displayable prior to reducing the color reproducibility. The applied image information is compensated to prevent reduction in the color reproducibility.